



PREVALENCE AND ADAPTIVE COPING BEHAVIOUR OF PREMENSTRUAL SYNDROME AMONG ADOLESCENT GIRLS

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ABSTRACT

Introduction: Premenstrual syndrome (PMS) is a set of physical, emotional and behavioral symptoms that start week prior to menstruation and subsides when the menstrual flow begins. **Materials and Methods:** A quantitative research approach with descriptive cross sectional design was used for 150 B.Sc Nursing students in the age group of 18 to 20 years. The sample was drawn through purposive sampling method. Premenstrual rating scale and check list was used to collect the data. Data was analyzed by using descriptive and inferential statistics. **Results:** Among 150 students 58 (38.7%) had not experienced any symptoms of PMS, about 51 (33.5%) had mild symptoms, 30(20.4%) were having moderate premenstrual symptoms, 11(7.3 %) had severe premenstrual symptoms. Among 150 students Rest 124 (82.66%) was the most common coping mechanism for the somatic symptoms followed by reduced caffeine intake 54 (36%), exercise 31 (20.66%) and analgesic 30 (20%). There was no association found between prevalence of PMS and selected demographic variables.

KEY WORDS: Premenstrual syndrome, adolescent girls, prevalence, adaptive coping behavior.

INTRODUCTION:

PMS is a condition of emotional, physical, psychological and behavioral disturbances that occur after ovulation and last till menstrual flow¹. Premenstrual syndrome (PMS) is an important health problem in young women mostly in adolescence. A Systematic Review and Meta-Analysis Study conducted using 17 studies revealed that pooled prevalence of PMS was 47.8% (95% CI: 32.6-62.9). The frequency of premenstrual syndrome in India was 53% according to International Classification of Diseases -10 (ICD-10) criteria, among which 42% was mild, 18.2% moderate and 31.7% severe². Girls with PMS report significant impairment in personal relationship compromised work levels and increased absence from social, academic and occupational activities. Still, it's possible not to let these problems control your life. Lifestyle adjustments can treat to reduce or manage the signs and symptoms of premenstrual syndrome.

OBJECTIVES OF THE STUDY:

1. To estimate the prevalence of PMS among adolescent girls.

2. To rank the common adaptive coping measures used during PMS among adolescent girls.
3. To find out the association between prevalence of PMS among adolescent girls with their selected demographic variables.

MATERIAL AND MATERIAL:

Descriptive approach with cross sectional research design was used to conduct study, at KAHER Institute of Nursing Science, Belagavi among females Nursing students between 18-20 years of age. The sample for the study was 150 students of 1st and 2nd year B.Sc. Nursing. Students were selected by using purposive sampling technique. Data was collected by using socio demographic data, premenstrual syndrome rating scale and checklist on the common adaptive coping behavior among nursing students. Data was analyzed using descriptive and inferential statistics.

RESULTS:

Distribution of sample's characteristic according frequency and percentage of demographic variables.

n =150

Sl No.	Demographic Variables	Frequency	Percentage
01	Age in years:		
	a) 18 years	32	21.3
	b) 19 years	64	42.66
	c) 20 years	54	36
02	Age of menarche:		
	a) 10-12 years	35	23.33
	b) 13-15 years	108	72
	c) Above 16 years	7	4.66
03	Number of days bleeding lasts for:		
	a) 2-3 days	14	9.33
	b) 3-4 days	30	20
	c) 4-5 days	62	41.33
	d) 5-6 days	35	23.33
	e) > 6 days	9	6
04	Describe your menstrual flow:		
	a) Mild	28	18.66
	b) Moderate	105	70
	c) Heavy	17	11.33
05	Number of days PMS lasts for:		
	a) 2-3 days	59	39.33
	b) 3-4 days	44	29.33
	c) 4-5 days	29	19.33
	d) 5-6 days	13	8.66
	e) > 6 days	5	3.33

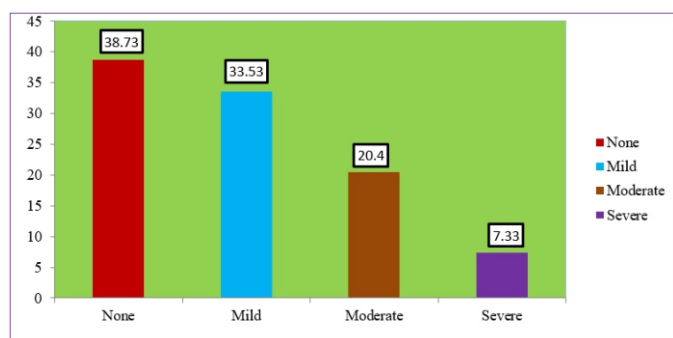
06	Mass media available at home: a) Television b) Newspaper c) Internet d) Radio	85 5 60 0	56.66 3.33 40 0
07	Do you perform any relaxation techniques: a) Yes b) No	71 79	47.33 52.66

Estimation of prevalence of PMS among adolescent girls:

SYMPTOMS	NONE (0)		MILD (1)		MODERATE (2)		SEVERE (3)	
	freq	%	Freq	%	Freq	%	Freq	%
EMOTIONAL AND BEHAVIOURAL SYMPTOMS								
Tension & Anxiety	29	19.33	77	51.33	40	29.33	4	2.66
Depressed mood	40	26.66	64	42.66	34	22.66	12	8
Crying spells	75	50	40	26.66	32	21.33	3	2
Angry and irritability	30	20	43	28.66	55	36.66	22	14.66
Oversensitivity	50	33.33	64	42.66	25	16.66	11	7.33
Unhappiness	50	33.33	44	29.33	40	26.66	16	10.66
Food craving (Overeating)	81	54	43	28.66	20	13.33	6	4
Social withdrawal	71	47.33	49	32.66	26	17.33	4	2.66
Poor concentration	46	30.66	52	34.66	39	26	13	8.66
PHYSICAL SIGNS & SYMPTOMS								
Joint and muscle pain	38	25.33	41	27.33	47	31.33	24	16
Headache	58	38.66	55	36.66	24	16	13	8.66
Fatigue	55	36.66	51	34	30	20	14	9.33
Weight gain from fluid retention	90	60	40	26.66	14	9.33	6	4
Abdominal bloating	48	32	54	36	33	22	15	10
Abdominal cramps	49	32.66	52	34.66	29	19.33	20	13.33
Breast tenderness	70	46.66	55	36.66	21	14	4	2.66
Acne flare-ups	71	47.33	50	33.33	21	14	8	5.33
Constipation or diarrhea	89	59.33	40	26.66	19	12.66	2	1.33
Sleep disturbance with sleeping too much or too less.	41	27.33	44	29.33	45	30	20	13.33
Appetite changes with overeating	81	54	48	32	18	12	3	2

According to the above given table the most common problems among emotional and behavioral symptoms was Food craving (Overeating) 81 (54%) and in physical signs & symptoms was Weight gain from fluid retention 90 (60%).

Frequency and percentage distribution of prevalence of PMS:



Majority 33.53% of the subjects were experiencing mild premenstrual symptoms, 20.4% were experiencing moderate premenstrual symptoms, 7.3 % were experiencing severe premenstrual symptoms and 38.73% students had no symptoms.

Frequency and percentage of coping Behavior adopted by nursing students:

ADAPTIVE COPING BEHAVIOUR	Yes		No	
	Freq	%	Freq	%
Exercise	31	20.66	119	79.33
Avoid salt before the menstrual period	16	10.66	134	89.33
Reduce caffeine intake	54	36	96	64
Reduce intake of refined sugars	37	24.66	113	75.33
Increase of fiber intake	67	44.66	83	55.33
Adequate rest and sleep	124	82.66	26	17.33
Uses any vitamin supplements	39	26	111	74
Uses Analgesics	30	20	120	80
Uses hormonal pills (Oral contraceptives)	6	4	144	96
Uses any other remedies	29	19.33	121	80.66

Results showed that Adequate rest and sleep 124 (82.66%) was the most common coping mechanism for the somatic symptoms and only 6 (4%) had referred to medical care and was under use of hormonal pills.

Results also showed that there was no association between prevalence of PMS and selected demographic variables (Age, age of menarche and menstrual flow).

DISCUSSION:

The findings of the study suggested that the most common problems among emotional and behavioral symptoms was Food craving (Overeating) 81 (54%) and in physical signs & symptoms was Weight gain from fluid retention 90 (60%).

Similar study conducted in Purba Medinipur district of West Bengal from July to August 2014 showed contradicting results among 244 students, Results showed that PMS was reported by 62.7% girls reported depression and 70.5% girl's anger. Irritability was reported to be as high as 84.8%. Anxiety and confusion were reported by 76.0% and 66.8% adolescent girls, respectively. Around one-third of girls experienced breast pain, and 55.3% of girls have also faced social rejection during that period. Headache and abdominal distension were reported by around 55% students. Only 14.7% of them reported limb swelling in premenstrual period¹.

The study conducted in Khon Kaen, Thailand on Premenstrual syndrome (PMS) among high school students showed that Forty-six (46.4%) of the participants in the PMS group reported that they self-administered treatment. The most common coping methods were analgesic drugs (38.4%) and recreational activities (26.3%). The participants also consulted their friends (33.9%) and their parents (22.8%) when they were suffering from these symptoms. Only 3% of them sought medical consultation⁴.

In the present study majority 33.53% of the subjects were experiencing mild premenstrual symptoms, 20.4% were experiencing moderate premenstrual symptoms, 7.3% were experiencing severe premenstrual symptoms and 38.73% students had no symptoms.

A descriptive-analytic study was conducted in Tehran, Iran showed contradicting that the severity of PMS in most of the participants (62.22%) was moderate, in 8.89% was mild and in 28.89% was severe⁷.

Present study showed no any association between prevalence of PMS and selected demographic variables (Age, age of menarche and menstrual flow).

Similar study conducted in Purba Medinipur district of West Bengal from July to August 2014 showed the contradicted the results by PMS was found to be associated with mother's occupation, amount of blood flow during menstruation, and presence of dysmenorrhea ($p < 0.05$)³.

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